

Fig 1A

	Data	Description
Data applied on A1:	1001	First Code nibble.
Data applied on A3:	1010	Second Code nibble.
Data received on A2:	1001	Same as transmitted on A1, therefore 'Healthy'.
Data received on A4:	1010	Same as transmitted on A3, therefore 'Healthy'.
Data sent on D0-D3 to AS-I interface:	10011010	(The second nibble is always different from the first.)

Fig 1B

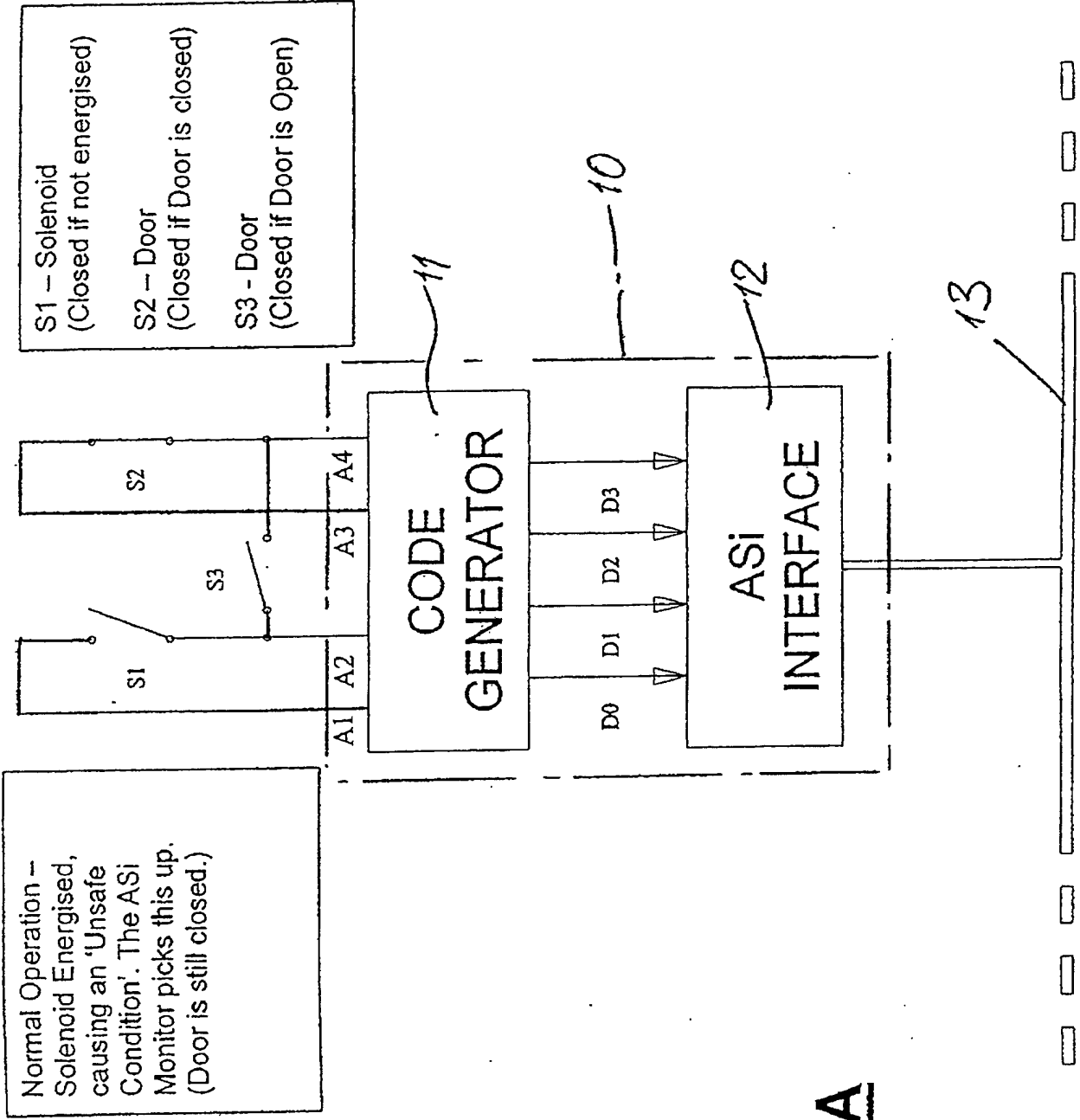


Fig 2A

	Data	Description
Data applied on A1:	1001	First Code nibble.
Data applied on A3:	1010	Second Code nibble.
Data received on A2:	0000	Data bits on A1 are suppressed, therefore this is an 'Unsafe condition'.
Data received on A4:	1010	Same as transmitted on A3, therefore 'Healthy'.
Data sent on D0-D3 to AS-I interface:	00001010	At least 1 data bit is suppressed, causing the ASi monitor to stop. ASi monitor knows 'Channel 1' has been operated.

Fig 2B

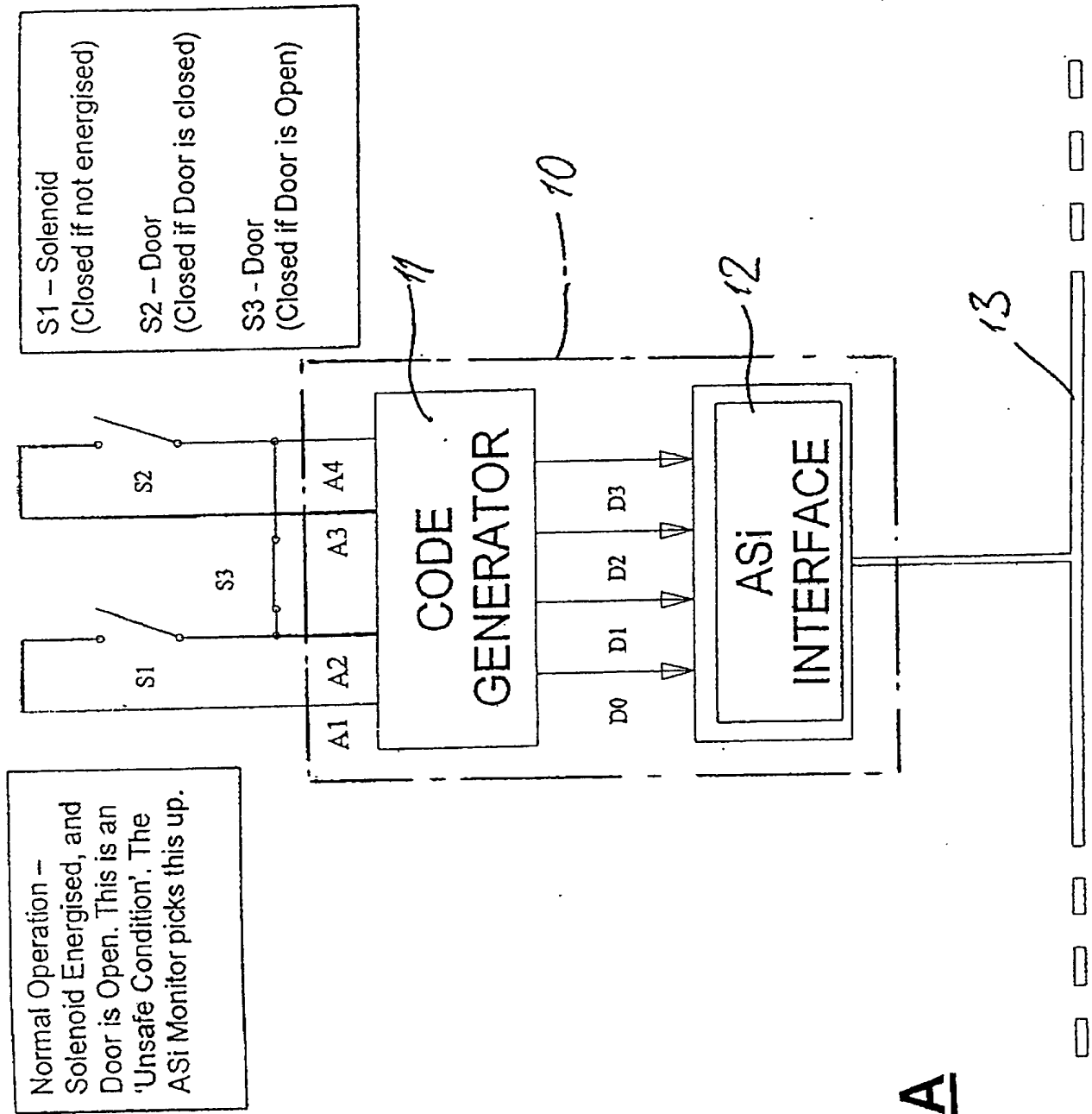


Fig 3A

	Data	Description
Data applied on A1:	1001	First Code nibble.
Data applied on A3:	1010	Second Code nibble. This is always different from the first.
Data received on A2:	0000	Data bits from A1 are suppressed, therefore this is an 'Unsafe condition'.
Data received on A4:	0000	Data bits from A3 are suppressed, therefore this is an 'Unsafe condition'.
Data sent on D0-D3 to AS-i interface:	00000000	At least 1 data bit is suppressed, causing the ASi monitor to stop. ASi monitor knows 'Channel 2' has also been operated.

Normally the Actuator would be re-inserted into the head of the interlock unit and the cycle would recommence from sheet 1. However, if someone tries to break the sequence, or a fault occurs, it will be detected **instantly**.

Fig 3B

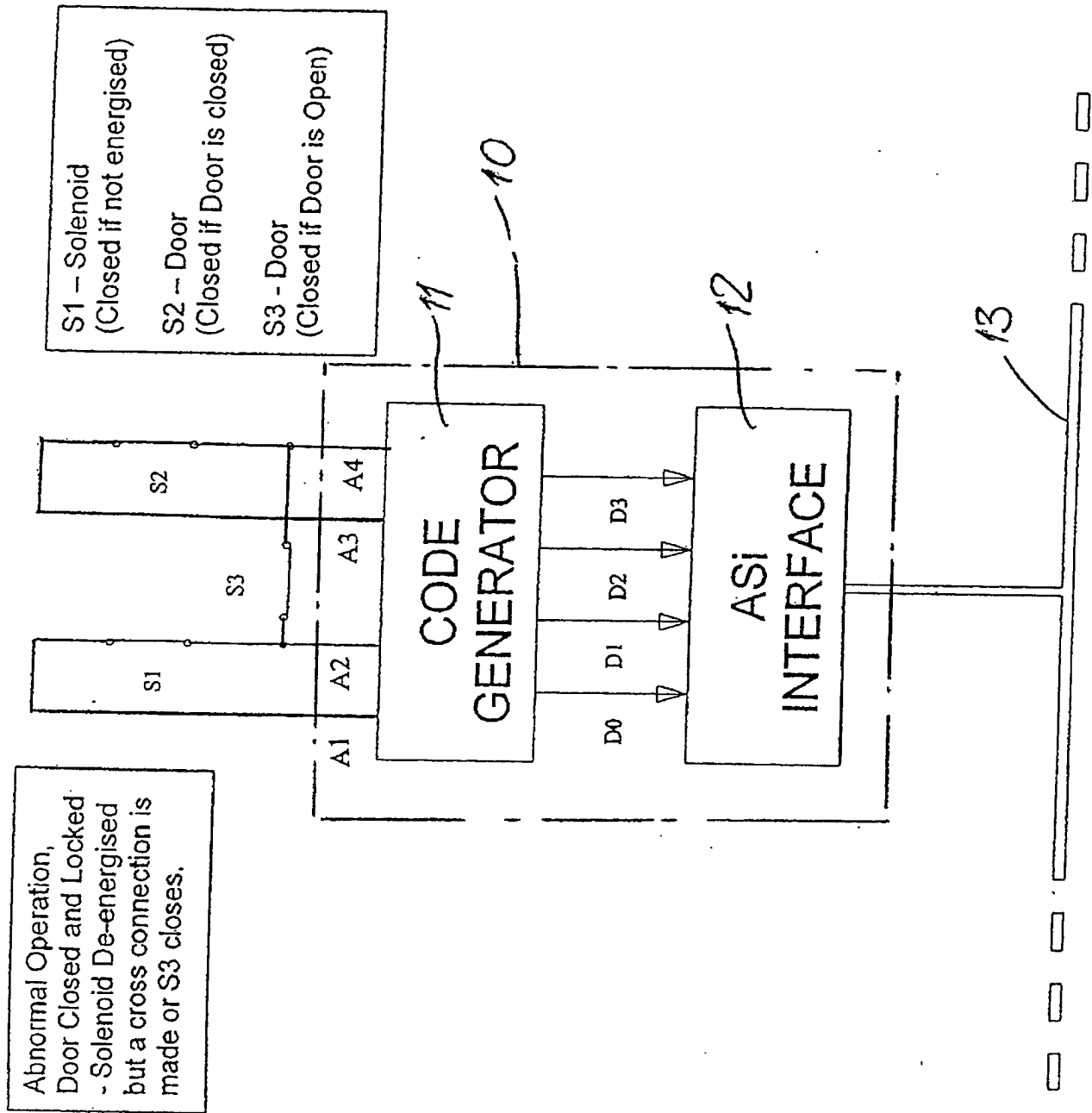


Fig 4A

	Data	Description
Data applied on A1:	1001	First Code nibble.
Data applied on A3:	1010	Second Code nibble. This is always different from the first.
Data received on A2:	1000	Some data bits have been suppressed. The data received is not the same as transmitted on A1, therefore this is an 'Unsafe condition'.
Data received on A4:	1000	Some data bits have been suppressed. The data received is not the same as transmitted on A3, therefore this is an 'Unsafe condition'.
Data sent on D0-D3 to AS-i interface:	10001000	At least 1 data bit is suppressed, causing the ASi monitor to stop. ASi monitor knows a fault has occurred.

Fig 4B

Fig 5

